UNIVERSITY OF WASHINGTON

ARBORETUM BULLETIN

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SUMMER, 1971

PRESIDENT'S MESSAGE

It has been a rewarding experience serving as President of the University of Washington Arboretum Foundation for the past three years. I have had the opportunity to work with and get to know a dedicated and loyal group of men and women who are really responsible for the many contributions that the Foundation has provided and is presently providing for the Arboretum. To the many fellow officers and committee chairman, I say many, many thanks for all of your help. Our new President, Mr. John Putnam comes well equipped for the work at hand as he has long been dedicated to the health and well-being of the Arboretum and to the Foundation. John will have our support in helping with the continuing programs and with the future business of the Foundation.

This issue of the BULLETIN is largely devoted to the Japanese Garden which certainly is one of the most popular areas of the Arboretum. The Garden, which was started in the fall of 1959 and completed and dedicated in June of 1960, is one of the more recent important additions to the Arboretum. Its original planning and subsequent care and additions thereto are testimonies to the efforts of many members of the Foundation who have been responsible for its success. Mr. and Mrs. Prentice Bloedel have had an abiding interest in the Garden from its inception and this is evidenced by the fact that the Unit most active on behalf of the Garden bears the name the Prentice Bloedel Unit No. 86.

Many, many others have given freely of themselves and it is impossible to mention them all, but certainly Mrs. Emily Haig, current and previous chairman of the Japanese Garden, needs to be recognized for her efforts. I hope you enjoy this issue on one of the jewels of the Arboretum, that of the Japanese Garden.

The Arboretum and the administration of the Arboretum face a major crisis in the immediate months ahead and perhaps for the next two years. The budget for the maintenance and operation of the Arboretum which provides the dollars necessary to accomplish the work and do all that is mandatory towards its upkeep and furtherance of its programs has been severely slashed by the most recent State Legislature. The dollars provided by the Legislature for the last biennium, which ended on June 30th, 1971, amounted to $319,232.00.

(Continued Inside Back Cover)

THE ARBORETUM BULLETIN

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Seattle, Wn. Summer, 1971

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THE UNIVERSITY OF WASHINGTON
Arboretum bulletin

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SUMMER, 1971

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COVER PHOTO: Panoramic View of Japanese Garden
Photo by: Mary Randlett

Inscription on the gate. Photo by: James Fukuda

In June, 1971 the Japanese Garden was eleven years old. This issue of the *Bulletin* attempts to show pictorially the beauty the Garden has acquired with maturity. As background information and to help those newer members of our organization and community, an edited version of the history of our Garden is reprinted from an earlier Japanese Garden pamphlet.

The Japanese Garden is a significant example of international friendship and community cooperation. The concept of the Garden began within the Arboretum Special Projects Committee in 1937. The idea was quiescent until 1957 when Carl Ballard, president of the Arboretum Foundation, appointed Mrs. Neil Haig to take action to make the garden a reality.

In July of 1958, Mr. T. Moriwaki, Superintendent of the Metropolitan Parks Division, Tokyo, stood on the site of our Japanese garden and after viewing the possibilities, asked if he might be granted the privilege of presenting preliminary ideas for its basic outline and construction.

Since a Japanese garden had been a dream of the Arboretum for some twenty-five years, the generous offer of Mr. Moriwaki was warmly accepted by the officers and directors of the Arboretum Foundation. A Japanese Garden Committee was set up, and steps were immediately taken to find the finest Japanese landscape architect to supervise the entire project. After considerable correspondence, it was determined that Mr. Juki Iida, creator of over a thousand Japanese gardens, and the outstanding assistant of Mr. K. Inoshita, Japan's foremost living landscape design engineer, should be chosen to do our work. Ground was broken in May of 1959, in the presence of Mayor Gordon Clinton and the Japanese Consul-General, Mr.

Southwest side of the Tea House. Photo by: Mary Randlett

Takeno, and others; at the same time the tea house, a gift to Seattle from the City of Tokyo, was being constructed under supervision of Mr. H. Hasegawa and Mr. T. Kato, representing the Shimizu Construction Co. of Tokyo.

Late in November of 1959, Mr. Iida, accompanied by his assistant Mr. T. Kitamura, arrived to photograph and sketch the Japanese garden area. Back again in Japan and working with Mr. Inoshita and four other foremost landscape designers, including Mr. Moriwaki, they prepared some thirty-six pages of plans which were used in the preparation and construction of our garden. Early in March, 1960, Mr. Iida and Mr. Kitamura returned to Seattle to proceed with the building of the garden. The

Yorozu Gardening Co. of Seattle was designated prime contractor, the Ishimitsu Co. handled the wooden structures, and Richard Yamasaki the tremendous rock work. The garden covers an area of about three and a half acres, and at the time of its construction was the largest authentic Japanese garden outside of Japan.

As one strolls from the "deep mountains" just south of the Tea House, the land descends to the tablelands where flowering cherry trees abound. Towards the north, the land falls to

Rock work in the garden. Photo by: Mary Randlett

the harbor area whence a complete view the length of the garden can be obtained. Each turn of the path produces another vista like the facet of an exquisite gem, each in its way lovely and perfect, — the whole, rich in color, symbolism and tradition. To achieve all this, the creators of the garden first cleared the area, dredged and enlarged the lake, brought in some 9,000 yards of earth and built the twin mountains. From Bandera, on the Snoqualmie River, over 600 rocks were hauled, each carefully selected by Mr. Iida and handled with the utmost care to prevent scratching. Each weighs over a thousand pounds, and some as much as eight tons. Each went to its preselected spot, and most are buried in the Japanese tradition, two-thirds underground. Smaller stones were selected and placed with equal precision; some were shipped in from Tokyo.

Hundreds of shrubs were used, including numerous azaleas, camellias, rhododendrons and other evergreens in good variety, many natives of Japan. Eleven hand-carved granite lanterns, imported from Japan, a traditional stone wash basin or *tsukubai,* adjacent to the tea house with a handmade bamboo dipper for the "owner's" use all add to the authenticity of the Garden.

The man-made structures include two entrance gates, two wooden bridges of different construction, a moon-viewing stand, an arbor and a wisteria trellis in the northeast corner. A machiai, or waiting place for participants in the tea ceremony is the most recent addition and completes the formal plan of the Garden. The Garden was dedicated and opened to the public on June 5, 1960.

Mr. Juki Iida, designer of the Garden, with Mr. Yorozu, the contractor of the garden. Photo by: Mrs. Neil Haig

Lantern and wash basin in the Tea House garden. Photo by: Mary Randlett

The photographs by Mary Randlett were taken in 1965 and show the growth and development of the Japanese Garden at that time. Mr. Fukuda's photographs were taken in July, 1971.

BRIEF HISTORY OF JAPANESE GARDENS AND THE UNIVERSITY OF WASHINGTON ARBORETUM GARDEN

JUKI IIDA AND ASSOCIATES — 1960

The philosophic concepts inherent in a Japanese Garden add also to a greater appreciation of its beauty. No one is better qualified to speak of this than the original designer of the Garden, Mr. Juki Iida. That which follows immediately was written by him at the opening of the Garden; his comments written for this issue are printed next.*

THE ART OF JAPANESE GARDENS is so old that it is really hard to trace its origin. It is generally believed that along with the introduction of Buddhism, ideas of gardening were brought from the Asiatic continent.

Although the original introduction of gardens came from the outside world, the ideas and technique of the Japanese gardens developed a new type under the climatic conditions of Japan. The Japanese garden has a distinctive feature of its own. It introduces the use of hills, forested areas, waterfalls and lakes. The future trend in Japanese gardening depends to a great degree upon how much the Japanese will incorporate the western design. Many examples of Japanese landscaping can still be found in old Kyoto and will become the heritage of the entire world, sources from which the West can receive instruction in the more leisurely art of living as practiced in the Orient.

The general rules of Japanese landscaping, to be followed in the design and construction of all types of gardens, while not of great importance to the creative designer, do review the historic development of the Japanese garden and allow the Westerner to obtain a fairly good idea of what the gardens are supposed to represent. The fundamental plan of a Japanese garden incorporates the hill and pond, the flat courtyard, the ceremonial tea garden and the popular "restaurant" type of gardens.

The University of Washington Arboretum's Japanese tea garden is one in which the Japanese native arts are incorporated for the pleasure of the American public. The garden is planned to be viewed from all sides, the ceremonial tea house being one of the main points of interest.

The dense secluded mountain forest covered with conifers on the southern portion of the garden represents the higher ground. From this forested area emerge two streams, one being natural and the other man-made, which seem to be flowing from the background hills over a waterfall, down a rockery to a point where the two meet near the mountain villa to form a lake.

From the neighborhood of the mountain villa the forest passes to the tableland and the view changes accordingly; thus the stream, after over-leaping the dam, presents a wide water level, forming the lake. Along the lake shore there are the cliffs rising, the cape projecting, the pebble beach and the sand beach; the building for the moon viewing appears on the western shore, behind that being the flowering garden of plum trees and cherry trees. In the northern portion of the lake the rock bed is protruding and forms islands, and bridges are spanned from an island to either shore of the lake. At one side of the harbor the wisteria trellis is set for the pleasure seekers of the village.

*Reprinted from ARBORETUM BULLETIN, Vol. XXIII, No. 4, Winter 1960.

The outlet of the lake forms a mountain torrent through the rock bed area of the northeastern shore and runs into the sea (the exterior of the garden).

Having in the center the water view which starts from the mountain as the stream and then forms the lake, paths are made throughout the garden to give various scenes for a round trip.

The entrances of the garden:

The main entrance is situated at the northern point along the Boulevard and accommodated with the roofed garden gate. The visitors enter on foot through this gate.

The enclosure and the way of opening the garden:

Around the garden, the pruned evergreen hedge about five feet high is to be provided. At the center of this hedge, the wire fence is set in.

The lake and the islands:

The water flows down and forms the lake. The southern portion of the lake shows the water view in the tableland, following the mountain area; on the lake shore the rock bed crops out, and there is the projecting cape and also the inlet. In the lake, the reefs are scattered and carp and trout are found.

To the north of the northern lake there are islands, and two bridges in different styles making the connecting path between the east and west sides of the lake. The islands are of rock and have low pine trees and a stone lantern composing the main view of the garden.

The northern portion of the lake from the islands develops a marshy landscape in the plain, and on the shore rocks are seen cropping out, while there are areas covered with reeds and iris, the grassy banks almost running into the water, the sandy beach and reedy strand. The north side of the lake shore has a stone wall for the developed area of the village (the clubhouse to be built). The dale scenery presented at the mountain area in the southern portion of the garden, and the stretch of water views starting from the lake in the tableland which passes into the marshlike lake of the plain ending at the village area, are composed of the synthesis of stone arrangements, plantations and other decorative facilities which is the framework of this Japanese garden and accomplishes the whole, together with the surrounding parts of interest.

The mountain area:

The area of steep slopes at the southern part of the garden is the mountain area where several mountains and hills rise and fall. Near the mountain pass where paths get together stands a tea stall named "Karakasatei." A wide road (carriage way) runs through the north portion of the mountains and is provided with a bridge over the stream. In the mountains, conifers, such as firs, Japanese cypresses, cedars, and *Torreya nucifera* together with the native trees grow luxuriantly and form thick forests. Near the source of the western stream, a storied stone pagoda stands as the relic of a mountain seminary and is seen from far away. From here, the forest begins to mix evergreen broad-leaved trees, and then deciduous miscellaneous trees and passes into the flat forest of the tableland. The undergrowth of the mountain area is gold-leaf plants and *Fatsia japonica,* etc., for the depths, and mixed azaleas and so on along the stream.

The plum and cherry grove:

To the northwest from the mountain villa and on the west side of the lake there is a flowering garden planted mainly with plum and cherry trees as the developed area. In the center of the garden a square-shaped summerhouse is built and affords a rest place. Trees are to be planted of horticultural varieties; the undergrowth of the grove consists of seven autumn flowers and other Japanese native shrubs and herbs forming a flower garden.

The coppice:

The coppice extends from the plum and cherry grove to the site of the clubhouse and consists of Japanese oaks, *Quercus serrata, Carpinus laxiflora,* wild cherry trees, Zelkova, etc., adding here and there high Japanese red pines and *Pinus Thunbergii;* the coppice ground is covered by the Japanese native wild grasses, ferns, and mosses, etc.

The camellia and sasanqua grove:

On the east side of the lake, Japanese native evergreens such as camellias and sasanquas are planted among the deciduous trees already existing and here a mixed plantation is made together with azaleas, and other shrubs. Inside the garden gate, at the main entrance, hollies and *Taonabo japonica* form as evergreen plantation along the road.

The tea garden of the mountain villa:

The garden of the mountain villa (tea house) is constructed as a simple and quiet court for the tea ceremony, accommodated with a waiting booth, a water basin, stone lanterns, stepping stones and plantations, surrounded by a hedge having two wickets made of branches and twigs. This garden is only to be entered when admitted for the use of the tea house.

Stone lanterns and illumination, etc.:

Stone lanterns set in various places in the garden are important accessories for the landscape, and illumination of the road is to be specially prepared. In due places in the garden, wooden benches and drinking water are to be placed for the use of visitors. ▲

Mr. Sad Ishimitsu, recently deceased, shows the special handwork to be found in the wooden structures of the garden.

Photo by: Josef Scaylea, **Seattle Times**

Northwest corner of the Tea House.

View over the lake from the North end of the garden.

One of the bridges over the lake.

Photos by: James Fukuda

South Gate to the garden. Photo by: James Fukuda

THE JAPANESE GARDEN - 1971

JUKI IIDA

This Japanese Garden was completed ten years ago in a form of one of Japan's traditional arts, to provide an opportunity to the people in the United States to enjoy a taste of Japan.

It has never been possible to build such a kind of Japanese style garden without the cooperation of gardeners engaged in this kind of work and of other concerned persons; it is, therefore, a great pleasure to seek this Japanese Garden cultivated in the United States.

This garden appears to be well balanced at present, although its trees were too small and its stones not very good-looking at the time of its completion.

I hope the beauty of the garden will be permanently maintained through your continuous loving care. Many famous gardens in Japan, laid out hundreds of years ago, have been kept in beautiful condition thanks to garden lovers.

A water-fall was constructed in the garden by piling a large amount of soil on the southern hill. Water from this fall flows to a pond and runs into a small river. A tea-ceremony house was also built to serve as a resthouse on the hill. The pond was designed after that of the Momoyama Era in Japan (about 300 years ago). There are two small islands in the pond, with traditional Japanese bridges such as "Yatsu-hashi", and "Do-bashi" added. Lanterns are fixed at the tips of the islands as places to enjoy watching the moon at night. On the centre island, a gate is constructed to resemble the "Chu-mon" of the "Shugaku-in" Temple in Kyoto.

The Southern part of the coastal line around the pond is a model of a fishery village. A lantern is also put in the centre of the pond to illuminate snow-falling during the night. Various kinds of flowers are planted all over the Northern part of the garden. Visitors can view

Lake with water lilies; Moon Viewing Stand in center left. Photo by: James Fukuda

all these scenes of the garden from the top of a hill in the Northern part. An "Azuma-ya", or an arbor, has been constructed on a slope on the Western side of this garden.

Method to trim trees and flowers in the garden

Trees planted in the area covering the part from the water-fall to the pond, which has been designed as a mountainous area, should be kept as nature-like as possible. Trimming of branches and leaves should not be necessary unless they suffer damage caused by blight and harmful insects.

In the case where trimming then becomes a necessity, only the blighted parts should be cut out. Plants in the areas around the pond should also be trimmed in a natural way.

Especially cherry trees must not be trimmed at all, unless they are damaged by blight. The reason for this is that when parts of a cherry tree are cut, it will wither entirely from the cut parts.

It has been said that it is much more difficult to preserve a Japanese Garden rather than to build one. Depending on its maintenance, I believe this garden will become one of the famous gardens outside Japan. I hope it will become one of the best Japanese Gardens in the world. Please give it all your love and care. ▲

Juki Iida

I understand that the Japanese Garden of Seattle is now marking its eleventh year since it was completed, and I can well imagine that under the excellent mangement the plants have fully established themselves by this time, enhancing the beauty of the Garden year after year. I sincerely hope that your Japanese Garden of Seattle will increasingly serve the citizens hereafter as a fine place of recreation.

Tatsuo Moriwaki

TATSUO MORIWAKI
Superintendent, Metropolitan
Parks Division, Tokyo

Toodo-gata, the Carl Ballard Memorial Lantern, is the largest of all the lanterns and commemorates the man who, during his term as Arboretum Foundation President, set in motion activity to bring a dream into reality.

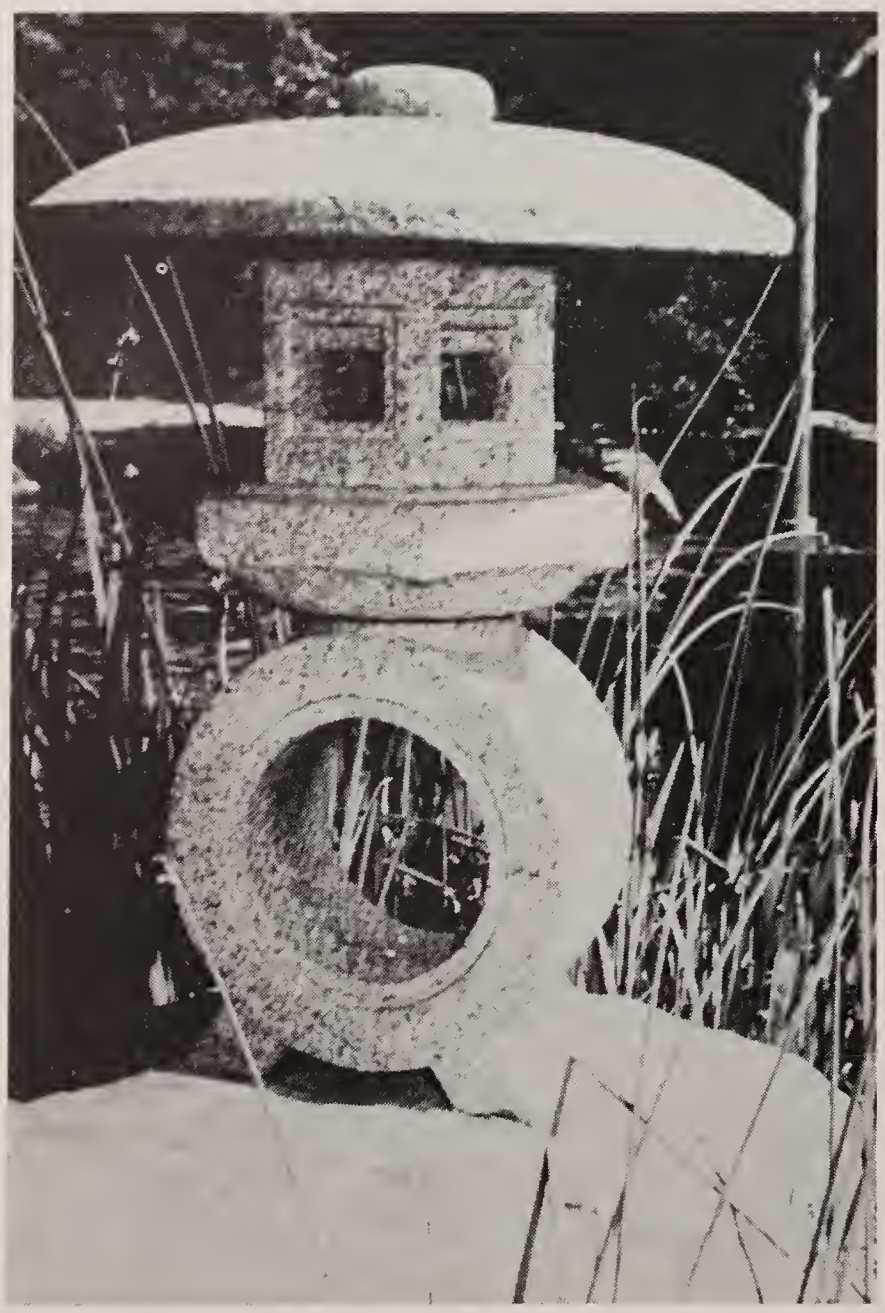
LANTERNS IN THE GARDEN

DORIS BUTLER

Japanese lanterns, says Mr. Iida, are important accessories to a garden. The Arboretum is fortunate to have ten beautiful lanterns and one stone pagoda in its Japanese Garden. These pictures are reproductions from colored slides which have been given to the Arboretum by Mrs. Neil Haig, along with scrapbooks containing letters, pictures and other memorabilia of the Garden from its inception to the present day. The descriptive commentary with each lantern is taken from *The Japanese Garden,* a pamphlet published by the Arboretum Foundation. It is available at the Arboretum Office.

Misaki-gata, Alighting Wild Geese, is a beacon at the tip of the rocky cape.

Reflection Lantern stands watch in the harbor.



Omokaga-gata lantern, characteristically perched on a stone ring, helps to illuminate the harbor.

Yukimi-doro, the snow viewing lantern, is picturesque in winter after a fresh fall of snow.
Upper Right

Maruashimoto-gata lantern is a simple cylindrical shaft lighting the path to the stream.
Lower Right

Todo-gata, the Kobe Friendship Lantern, is a gift from Seattle's sister city, Kobe. Such Kasuga style lanterns were designed as votive lights for the shrine of Kasuga, a Shinto deity, at Mara, Japan. The lantern symbolizes earth, water, fire, wind and sky. A placque on its pedestal reads "May the light shine everlastingly on the friendship between Kobe and Seattle."

Oribe-gata, Crypto — Christian Lantern, was created by Turuta Oribe (1542-1615), a philosopher and Master of Tea Ceremony and landscape designer. This style lantern is often used beside the *tsukubai* or stone wash basin near the ceremonial Tea House.

Okazaki-gata, the Turtle lantern because of the Turtle carved on its base, is named for the City of Okazaki. This lantern is a gift from the City of Kobe.

Cherry blossoms, yes,
They're beautiful . . .
But tonight
Don't miss the moon!

So-In

Zyvisso-to, Korean tower, eleven storied pagoda, which Mr. Iida says "is to be viewed as a 'ruined seminary.' "

Kalua-gata lantern reflects light on the path to the waterfall.

The slightest breeze
Blows and the sky's dry
Shell is filled
With the voice of Pines.

Onitsura

GROWING ALPINES FROM SEED

*ALTHA I. MILLER**

Much of our native flora is becoming scarce or disappearing altogether with grazing, logging, and mining. Our burgeoning population is absorbing large areas for housing where wild flowers once flourished. Clearing land, collecting plants and tramping indiscriminately over delicate wild flowers accounts for much of the damage too, so if we want to save our flora for posterity, it behooves us to begin now to take care of it.

Wild plants should be left to grow and increase in their native habitats where they will exist for the enjoyment of all. Collecting only a few seeds will be sufficient to provide all the plants you want for your garden.

I have never heard of anyone being able to grow high alpines like *Erythronium montanum* (Glacier Lily) or *Anemone occidentalis* at our lower elevation. However, they grow at such high elevations, they usually are in National Parks where they are protected by law.

It is the subalpine flora which is in a more critical situation so we should concentrate on propagating these plants from seeds, as they are in mountain areas where logging, grazing, and camping are common. *Phyllodoce empetriformis, Empetrum nigrum, Gaultheria humifusa, G. ovatifolia,* and *Kalmiopsis leachiana* all germinate well in spaghnum or a good grade of peat moss. *Loiseleuria procumbens, Diapensia lapponica* and *Saxifraga oppositifolia,* some of the more rare plants, can also be grown in straight peat moss. The first two species are found in Canada, Alaska, and Japan and the saxifrage only rarely in our mountains and in Europe. *Lewisia cotyledon,* a native of Oregon and California, *Lewisia tweedyi,* endemic to the Wenatchee Mountains, and all gentians are easy from seed sown in a mixture of sand and peat. Collected plants with their extremely long, fleshy roots are very difficult to establish so seedlings provide you with a plant much easier to transplant and one you can hope to grow on successfully.

Some plants not classed as alpines or subalpines, such as *Clintonia andrewsiana,* species iris, penstemon, *Erythronium oregana, Anemone deltoides,* and many others, are disappearing rapidly due to housing projects, highway building, and logging, so should also be preserved by growing from seed. Fortunately, many of our most beautiful plants protect themselves, more or less, by going dormant for long periods.

After sowing the seeds, a pane of glass should be placed over the flat or pot being used, then covered with newspaper until germination takes place. All except large seeds can be sown on the surface. The glass conserves moisture and provides humidity for the tiny seedlings. After germination, the flat should be moved to a place where there is filtered light with no midday or hot afternoon sun. During very wet weather the glass may have to be wiped off inside occasionally as then there might be too much moisture. Sand and peat dries out much faster than the straight peat moss, so has to be watered oftener. Never let your seedlings dry out, as this usually proves to be fatal.

When the seedlings are large enough, the glass can be removed for gradually longer periods to harden off the plants. While the glass is off the flat, a screen should be placed over it for protection from birds, squirrels and chipmunks as they have a special fondness for scratching and digging in seed flats and pots. If you are going on a trip, it is better to move your flats to a more shady location and leave the glass on to conserve moisture. A very weak solution of liquid fish used occasionally is beneficial.

We use wire cages made of one quarter-inch mesh over our flats for protection. Then the pane of glass can be placed on top of the cage

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*Mrs. (Harold H.) Miller is an enthusiastic member of the Rock Garden Society. She and Mr. Miller have collected, propagated, and photographed many rare and beautiful plants from all over the world.

to protect the delicate seedlings from heavy rains or drip from overhead trees. This works well for us as we have many very tall trees and drops from a hundred feet can pretty well flatten out a tiny new seedling.

Most of the instruction on seed planting tells you to use portions of loam in your seed planting mixture but unless you sterilize it you have a fungus problem and damping off of plants. Both peat and sand, being sterile, are much safer and easier to use and I would never go back to the old prescribed method. The only thing then you have to watch for is too much or too little moisture. Of course each one should work out and use the method which proves the best for him.

The easiest way to obtain seeds is to belong to an Alpine Garden or Rock Garden Society where they have excellent annual seed exchanges for their members. However, if you wish to collect your own, always carry ordinary paper envelopes with you. Plastic bags should not be used as they hold moisture. The time to collect seeds is usually in August and September. For late-blooming plants you might have to hunt for your seeds in October. Type of season and elevation both affect the times of ripening of seeds so you have to be constantly on the alert for them.

Good hunting!

Kalmiopsis leachiana **in North Umpqua River valley in Southwest Oregon.** Photo by: B. O. Mulligan

NATIVE ALPINES FROM SEED

*CHARLES THURMAN**

In the collections of native seeds I have found, in many instances, that one must get the seeds before they are fully ripe or they are dispersed and unavailable. This is particularly true of *Lewisia, Claytonia, Dicentra, Phlox,* and others. This group I have also found will germinate better if sown immediately. I have always tried to get them just as the very first capsules are ripening and then collect stems and all and place them in a large paper bag or box, the extra moisture in the stems being just sufficient to mature unripe seeds. Care should be taken to see that they are loose, with plenty of ventilation so that mold does not develop. As the seeds ripen, they fall from the pods and are nice and clean, ready for sowing or packaging. Most of my seeds are handled this way. Of course, *Douglasias,* etc., have to be painstakingly plucked, one at a time.

As to storing, I find that a dry basement gives about the best results, as the temperature and humidity are about ideal there. Mine runs at about 50 - 55° and the furnace seems to take care of excess humidity. Glass jars work nicely for seeds like *Lewisias,* which should not get too dry. If one wants to hold seed over, a quart fruit jar in the refrigerator will hold many packets, but should be sealed. Many native seed will be kept viable for several years by this method.

Germination depends to a large degree on the previous treatment of the seed. Much seed, especially from the exchanges, has been allowed to get too dry, warm, or old and therefore germinates poorly. I think one cardinal rule for good germination is to plant as soon as possible after collecting. *Lewisias* as well as many, many others will come like radishes the following spring (providing, of course, that other conditions are met) when treated this way. I always allow a period of freezing and thawing, and seeds, summer or fall, planted and left outdoors over winter usually come very well provided they are not allowed to dry out, especially in early spring when the coatings are beginning to crack and germination is just starting.

Of course there are many other factors too numerous to mention here that affect germination, such as light, temperatures at time of

*Mr. Thurman is Supervisor of Horticulture for the Spokane Park Dept. For many years he maintained a nursery which specialized in natives and exotics which he had collected or propagated.

Lewisia tweedyi
in Cascade Mountains in Washington.

Photo by: B. O. Mulligan

germination, moisture, seed coatings and inhibitors, etc. For instance, *Lewisias* germinate best below 40° and some say will not germinate above that temperature. I have found, too, that many native, and especially alpine, species come poorly the first year but germinate very well the second year after seeding so therefore seed flats should be set back in a shady place until the second spring. This is especially true of exchanged seeds, many of which have been held just a little too long for ideal germination.

Much more that could be said on this subject, has already been said by several authors, who can be found in any library and should be read by those working with alpine plants and seeds, but these are a few of my findings over the years that I have dealt with these plants.

HONORED

Donald Wyman, honored as "a man whose devotion to horticulture has been absolute" is the recipient of The Arthur Hoyt Scott Garden and Horticulture Award of $1,000 and a round medal with a man cherishing and cultivating the ground on one side and the tree of life on the other. The Scott Award was accorded Dr. Wyman by a special committee chaired by Swarthmore College President Robert Cross.

Dr. Wyman, Horticulturalist Emeritus of the Arnold Arboretum of Harvard University, has continued his horticultural activities since his retirement from the Arboretum last year. He is the author of five books, three of which have become standard reference works: *Shrubs and Vines for American Gardens; Trees for American Gardens; The Arnold Arboretum Garden Book; Ground Cover Plants;* and *The Saturday Morning Gardener.* In addition, in 1970 he published a garden encyclopedia, and he has contributed more than 1000 articles on woody plants to major horticultural publications of the U.S. and Europe.

New Foundation Officers

Front Row, l. to r.: Phillip G. Johnson, Jr., Vice-President; John A. Putnam, President; Mrs. Allen Moses, Vice-President. Back Row, l. to r.: M. Chris Johnson, Vice-President; Donald C. Davis, Treasurer; L. James Brady, Vice-President. Miss Phyllis Cavender, Secretary, was absent when picture was taken.

Photo by: Joy Spurr

ARBORETUM SPOTLIGHT

J. A. WITT

Sun-warmed lawns, shaded glens, and lush green vistas are the summer characteristics of the Arboretum. Although the prevailing colors are shades of green, there are still patches of bright color from flowering plants in early summer and from fruit and autumn foliage in the latter half of September. Even the summer sounds of the Arboretum are different from those of other times. Birds are busy everywhere, but no longer sing their spring songs. Often the dominant sound is the distant clatter of a mowing machine or the endless swish-swish of sprinklers struggling to alleviate the summer drought.

Summer-blooming trees and shrubs are concentrated in certain areas of the Arboretum, and the visitor looking for flowers may want to spend some time in these collections. A flowering calendar, available at the Arboretum Office, will help the visitor find what there is of interest during the summer months in the Arboretum. The letter-number combinations refer to the map grid system on the back of the folder.

The mock orange and deutzia collections (K-5 and L-5) are normally in bloom in June as are the *Cistus* or rock roses (M-5). The hardy silk trees (*Albizia Julibrissin*) flower in July and August. The hydrangea collection (O-5 and P-5), containing both species and hybrids, is in full flower during the same months. Just south of them are the Stewartias (O-5 and O-6) which generally reach their peak of flowering in early July. Plantings around the office and greenhouses (G-5 and H-5) contain many unusual plants that flower during the summer months. An assortment of showy *Clematis,* both cultivars and species, grows on the lath houses.

Greenhouses are open to visitors during working hours, 8:30 a.m. to 4:00 p.m. weekdays, but are closed on weekends. While greenhouses are primarily for growing plants for the Arboretum grounds, a small display house on the left (east) side contains a collection of trees and shrubs that are not hardy out of doors.

JAPANESE GARDEN

The summer visitor to the Japanese Garden will find it is predominately a place of textures and subtle blends of foliage colors. Few flowers bloom except the water lilies floating on the murky green of the pond, the Japanese irises *(Iris ensata)* that flower in multicolored pastels during late June and July on the marshy shore of the lake, and a few late-flowering azaleas.

Summer is an excellent time to observe the garden's basic patterns where strength and interest do not depend on the bright colors of flowering plants. The visitor may study the way the pines are pruned to show off their strong branching pattern and to display their trunk structure, or may examine the special relationships between rock and lantern or rock and rock.

The latter half of September is the start of the fall color season, although the most brilliant display of autumn leaves comes later. Japanese maples and winged *Euonymus* provide the primary foliage color at this time.

Summer hours for the Japanese Garden are from 10:00 a.m. to 7:30 p.m.

There is a small admission charge. The Tea House is for aesthetic purposes and is not open to the public. No food is served in the garden.

THE WATERFRONT TRAIL

One of the most popular areas for summer walking in the Arboretum is along the Waterfront Trail, a half-mile walk across the marshes and islands of Union Bay. The green of the cattail marsh is broken by splashes of color from rose-pink Douglas' spirea (*Spiraea Douglasii*) and the spikes of purple loosestrife, *Lythrum Salicaria*. The trail is a favorite place for bird watching and is an ideal location to observe the activities of boats on Union Bay.

ARBORETUM CLASSES

Autumn, 1971

The College of Forest Resources administers the education program of the University of Washington Arboretum. For further information, call 543-2730. To register, send check (made payable to the University of Washington) to:

Arboretum Courses
286 Bloedel Hall
University of Washington
Seattle, Washington 98105

FALL TOURS Mr. Joseph Witt, Assistant Director of the Arboretum, will conduct tours of the Arboretum grounds in fall color, including the Oak Section and the Woodland Gardens. Class limited to 25. Thursdays, Sept. 30, Oct. 14, 28; 1-3 p.m. 3 sessions, $5.00.

BIRDS OF THE ARBORETUM Mrs. Zella Schultz, noted ornithologist, will conduct a field course in the Arboretum dealing with bird identification and adaptation. Class limited to 20. Students should have binoculars. Saturdays, Oct. 9-30; 9-11 a.m. 4 sessions, $10.00.

BONSAI CULTURE FOR BEGINNERS Mrs. Horace Raphael, authority on bonsai culture, will teach a series of 10 workshops for beginners. Students will receive two trees suitable for bonsai, and may add their own selections. Each section limited to 12. 10 sessions, $30.00.

Sections A; Tuesdays, Oct. 19, 26, Nov. 2, 9, Feb. 22, 29, March 7, 14, 21, April 11; 10:30 a.m.-12:30 p.m.

Section B: same dates; 7:30-9:30 p.m.

This is your Arboretum, kept alive by your support

We are pleased to welcome the following new members (March 1, 1971 through May 31, 1971): *Sustaining:* Mrs. Walter Donahoe; Glen Hamilton, M.D.; Mrs. R.P. Harrison; Mrs. Lloyd P. Johnson; Peter V. Kreisler; Mr. & Mrs. William L. Shea; Lloyd Thorpe. *Annual:* Mr. & Mrs. Kenneth E. Batker; Laurence O. Barret; Mr. & Mrs. Eddie Bauer; Mrs. John F. Bender; Charles W. Bingham; June M. Buckles; Mr. & Mrs. Bruce Butterworth; Mrs. J.R. Calahn; John R. Caruso; Mr. & Mrs. Douglas De Forest; Mrs. Roy L. De Laney; Thomas J. Delendick; Mrs. W. David Del Valle; Mrs. Peter K. Domoto; Mrs. Albert K. Eng; Mrs. E.K. Erickson; Mrs. James Ferris; Fruit Valley Nursery; Mrs. Louis R. Fry; Mrs. William L. Gonzales; Mary Alice Greene; Mr. & Mrs. Albert V. Griffiths; Mrs. William E. Hardy; Mrs. Michael Harrington; Diane S. Heller; Douglas E. Jackson; William B. Johnson; Mrs. Wilhelm Jorgensen; Mrs. Almon Keigley; Mrs. John E. King; R.R. Koeppler; Mrs. Roger C. Lindeman; Mrs. Stanley R. Litt; Mrs. T.G. Marshall; Mrs. Harlow C. May; Mrs. James Navarre; Mrs. William F. Niedringhaus; Mrs. Lloyd A. Osborn; Mrs. Jerilyn Petersons; Mrs. Earl G. Pilgrim; Mrs. Mary Anne Reinert; Eleanor C. Robb; Mrs. Gordon Roome; Mrs. C.E. Rozgay; Miss Kathleen M. Sabo; Mrs. George W. Shields; Mr. & Mrs. Lindton S. Snapp; Mrs. Audrey Snow; Mrs. Henrik M. Sortun; Mrs. D.R. Sparkman; Mrs. L.C. Stevenson; Mrs. Charles R. Stewart; Mrs. G. Charis Szikszoy; Mrs. Phillip P. Tanselli; Mrs. W. Eugene Taylor; Mrs. Frank Thorne; Mrs. Lynden M. Watts; Mrs. W.L. Webb; Mrs. Charles E. Weems; Mrs. Jon Werrbach; Mrs. Donald P. Wescott; Mrs. James B. Willis; Mrs. Tetsu Yasuda; Mr. & Mrs. Yusuf Yoler; Mrs. Kenneth M. Zinn, Jr.

We are also grateful to the following members who have increased their dues to: *Contributing* — Mrs. Rognar Brochner. *Sustaining* — Mrs. Arthur Hainsworth; Howard Hulet; Mrs. Robert T. Tuttle.

UNIT CONVERSATIONS

Highlighting the May meeting of the Unit Council of the University of Washington Arboretum Foundation was the installation of five new officers for the 1971-1973 term: General Chairman, Mrs. Allen D. Moses; Mrs. Joseph Moodie, 2nd Vice Chairman; Mrs. Lew R. Micklesen, 3rd Vice Chairman; Mrs. Charles E. Simons, Jr., Secretary, and Mrs. David Veblen, Assistant Secretary.

The sun shone down on hundreds of eager customers who thronged through the gates to take advantage of the large variety of plants offered Thursday, April 29 from 4 to 8 and again all day on Friday, April 30th at the Arboretum Foundation Spring Plant Sale.

The fortunate ones who were able to latch onto a grocery cart, made their way with supermarket skill through the various departments and quickly filled them up with a variety of blooming plants.

A larger number of rhododendrons, azaleas, trees, shrubs and perennials, as well as dahlias, herbs, geraniums, fuchsias, house plants, and various kinds of garden art were sold than ever before. The new camellia department was a resounding success and was completely sold out by the end of the day on Friday. Our greenhouse provided many small but choice items from our own arboretum cuttings.

Hundreds of hot dogs, cups of hot chili, homemade cookies, donuts, and cups of coffee were served and consumed by the over 300 workers who helped with the plant sale and hundreds of hungry buyers who found it a pleasant addition to their shopping.

The many "Sold" signs displayed on plants, even before the sale opened, was an indication of the success of our Pre-order Department. We hope those who wondered why there were so many of these signs in evidence at the start of the sale will remember next year to order their special choices through this department and save themselves a lot of time and trouble.

Finally, the Plant Sale Chairmen, Lee Clarke and Nookie Fellows, would like to thank everyone who participated in the many months of hard work and planning which were necessary to make the Plant Sale such a resounding success. So much work and effort was contributed by so many people, it would be impossible to name and thank them all, but such cooperation has brought the final total to $19,300. Of course there are still many bills to be paid, but the indication is that we have had a new sales record in 1971.

LEE CLARK
NOOKIE FELLOWS
Plant Sale Chairmen

The Oliver B. Thorgrimson Cup, which was first awarded in 1962 to the Unit which contributed the most during the calendar preceding year to support the Arboretum, was presented this year at the May Unit Council Meeting to Unit #86, the Prentice Bloedel Unit. Organized four years ago by people having a special interest in the Japanese Garden, the Unit received the award for its efforts in maintaining the Garden and Teahouse as it now exists and for promoting its future development. 1970's projects included: helping to arrange for regular pruning in the Garden; donating over 100 man hours to renovate and refurbish the Teahouse, and providing funds for this; holding an annual August "Moon Viewing" party in the Garden, and an annual fund raising Silent Auction in November.

The committee appointed for the purpose of selecting the most deserving Unit each year consists of three Unit Council members, two members from Unit #49, (which donated the Cup to Unit Council) the Executive Secretary of the Arboretum Foundation, and the Arboretum Director.

Raines Unit, #35, of West Seattle celebrated its 25th Anniversary in May, reports Chairman Mrs. Warren E. Calvin. The Unit, which has been consistantly active in the support of Seattle's Arboretum since 1946, boasts the loyal membership of three of its original charter members: Mrs. Will Meenach and Mrs. Robert Russell of Vashon Island, and Mrs. E. Galliac of West Seattle. Total current membership is 18.

Mrs. Dan Beebe, Chairman of the very successful 1971 Work and Fun Day — Arboretum Foundation Unit Council — reports that a great deal of "spring cleaning" was accomplished April 14 in our Arboretum. Mrs. Beebe was assisted by Mrs. James Montgomery.

Morning clouds threatened rain but were displaced by sunshine at Noon in time for a short program and awards presentation. Mr. Mulligan and Dr. Gessel both expressed appreciation for the great turnout of workers.

One-hundred thirty-six workers signed in and contributed 415 hours and 30 minutes of energetic gardening. First prize for best attendance went to Unit #5 with 57% of their members being present. First prize in the Unique Hat Parade went to Mrs. Allan Drake. Door prizes were contributed by the Garden Art department of the Plant Sale and gave workers a preview of what was to be sold at the April 29-30 event.

Unit #29 put in the most total hours — 36 hours and 45 minutes — altogether. There was a three-way tie for the most individual hours given: six hours each for Sue Gilbert, Mary Parker and Mary Ann Germann of Unit #72. Each was awarded a prize plant at the May Unit Council Meeting.

Unit #39 deserves a special thank you from all Work and Fun Day participants for its thoughtfulness in providing catered-in coffee for gardeners during the long day. A nearby resident and longtime Work and Fun Day supporter, Dr. Holloway, again assisted in the dispensing of the hot brew, making the rounds in his golf cart. ▲

"Faith came singing into my room and
other guests took flight
Fear, anxiety, grief and gloom sped
out into the night;
I wondered that such peace could be
but faith said gently 'Don't you see
They really could not live with me.' "

Mary Eastman — May, 1971

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Book Reviews

CHARLES SPRAGUE SARGENT AND THE ARNOLD ARBORETUM — by S.B. Sutton Harvard University Press, Cambridge, Mass. 1970. $10.00.

Anyone with even a cursory interest in public gardens is acquainted with the Harvard University's Arnold Arboretum, without doubt the prime example of American arboreta. The reason for its high position is probably less well-known since it depended primarily on one man, C. S. Sargent, and this book is an account of the close relationship between the man, his love for trees and the Arnold Arboretum. Professor Sargent had a very complex personality. He was a product of his times, a rather formidable combination of the proper Bostonian and the mid Victorian male. He was a self-made man in his own field, the study of trees, yet independently wealthy and of excellent family. This combination was just the right one for starting a new arboretum, for he had the enthusiasm and drive that often typifies the amateur turned professional and at the same time had the wealth and influence in his community to get the necessary support for his fledgling garden of trees.

Although the book deals primarily with Charles S. Sargent there are fascinating sketches of men and women who played important parts in the early days of the Arnold Arboretum and in American horticulture, botany, and forestry during the years when he was active. Such famous men in the plant word as Asa Gray, Frederick Law Olmsted, John Muir, Gifford Pinchot, Sir Joseph Hooker, all influenced or were influenced by Sargent. More directly, Professor Sargent, as Director of the Arnold Arboretum, played an extremely important role in the lives of the members of his staff. For instance, E. H. "Chinese" Wilson, Joseph Rock, and William Purdom, all famous plant collectors, made expeditions for Sargent and the Arboretum.

He developed an outstanding staff to support his work in the Arboretum. Perhaps the best known are E. H. Wilson who became Assistant Director after his collecting days were through and Alfred Rehder who is still a recognized authority on cultivated trees and shrubs. Sargent was able to hold the loyalty of his staff despite low wages and less than ideal working conditions, a fact that I find most impressive.

Miss Sutton deals most sympathetically with Professor Sargent, yet she is not afraid to point out his foibles. He was a strong-minded man, one might even say opinionated, and as is often the case with such men, he was not flexible enough to change. This is best exemplified in his treatment of the American hawthorns, *Crataegus,* now considered a complex group of hybrids and species. Sargent, after years of studying hawthorns had named hundreds of "species" most of which are now recognized as not being of specific rank. He and a few other *Crataegus* students made such an unfortunate tangle of the nomenclature of this genus that it has not been sorted out to this day. It was not because he loved hawthorns, quite the contrary, but he could not conceive that the variations he was seeing could be caused by hybridization. Yet this same intensity of purpose when properly channeled produced the magnificent *Silva of North America,* his *Manual of the Trees of North America* and the Arnold Arboretum.

If I were to find fault with this book it would be that Miss Sutton expects the reader to have more knowledge of Harvard University's history than I least have, but this in no way detracts from the fascinating story of C. S. Sargent and his life's work. I feel that this is an important book for anyone interested in the history of American horticulture and/or forestry.

JOSEPH A. WITT

HANDBOOK ON CONIFERS, ed. by Henry Teuscher and Marjorie J. Dietz, with the assistance of Frederick McGourty, Jr., and the Editorial Committee of the Brooklyn Botanic Garden. (A special printing of *Plants & Gardens.* v.25. mo.2. 1969) Brooklyn Botanic Garden, 1000 Washington Avenue, Brooklyn, N.Y. 11225. $1.50.

In the 105 pages of this *Handbook* almost everything you ever wanted to know about planting conifers can be found. It is succinct, authoritative, and current, from its article on "New Conifers for American Gardens" to listings of the 50 finest conifers, the 10 most satisfactory confiers for every region, books about conifers, information on moving large conifers, coniferous trees for small gardens, diseases of conifers, etc., etc., etc.

The Listing of the ten most satisfactory conifers for every region includes a section for Puget Sound by Brian O. Mulligan, Director of the University of Washington Arboretum. There are also a number of illustrations of handsome conifers from the Arboretum: p.6, *Abies procera,* p.8, *Chamaecyparis lawsoniana,* p.9, *Chamaecyparis nootkatensis,* p.22, *Pinus armandii,* and p. 29, *Thuja plicata;* in addition, the frontispiece is a photograph by Mr. Mulligan of the famous California Incense cedars *(Calocedrus decurrens)* at Westonbirt Arboretum, England. Several other illustrative photographs are also by Mr. Mulligan.

On the back cover is a listing of "The World's Best Illustrated Garden and Horticultural Handbooks", each one a complete, concise, manual, 64 to 100 pages, priced from $1.00 to $1.50, on many subjects of special interest in this region. Among them: Handbook 10 — Rock Gardens, $1.00; #13, Dwarfed Potted Trees — The Bonsai of Japan, $1.00; #28, Pruning Handbook, $1.00; #33, The Gardens of Western Europe, a copiously illustrated guide-book for garden-minded travellers, $1.00; #55, Origins of American Horticulture, $1.25; #59, Ferns, $1.25. These, and many others, can be ordered direct by name and number, from the Brooklyn Botanic Garden.*

BERNICE FERRIER SMITH
Forest Resources Librarian
University of Washington

*Many Brooklyn Botanic Handbooks are available at the Foundation Office, EA 4-4510.

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PRESIDENT'S MESSAGE

(Continued from Inside Cover)

The action taken by this, the most recent Legislature, cut the budget by well over 50% and though the University has had cuts of their budget in other areas they have allocated some additional funds to the Arboretum which still, however, at this writing, provides slightly less than 50% of the previous biennium to operate the Arboretum for the next two years. This cut-back is much larger than almost any other University department suffered and makes it impossible to carry out any regular and normal programs for the Arboretum. At this writing we are not fully aware of the entire affect of these cuts, however, as a result we may shortly call upon all of our members to make their respective Legislators aware of the lack of understanding and consideration of the Arboretum and of the possible long term damage that could be done to a major cultural asset of the Pacific Northwest. We are hopeful that some relief might be afforded, but again at this writing there is none in sight.

Robert J. Behnke

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